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CLAIMS

1. A process for cleaning metals comprising a step of contacting a metal with an aqueous solution comprising hydrogen peroxide and at least one compound selected from the group consisting of complexing agents based on phosphonic acids, salts and degradation products thereof in an amount from about 10 to about 60 wt% based on the amount of hydrogen peroxide.
2. A process as claimed in claim 1, wherein the aqueous solution comprises at least one compound selected from the group consisting of complexing agents based on phosphonic acids, salts and degradation products thereof in an amount from about 20 to about 50 wt% based on the amount of hydrogen peroxide.
3. A process as claimed in claim 2, wherein the aqueous solution comprises at least one compound selected from the group consisting of complexing agents based on phosphonic acids, salts and degradation products thereof in an amount from about 35 to about 45 wt% based on the amount of hydrogen peroxide.
4. A process as claimed in claim 1, wherein the complexing agent is based on at least one compound selected from the group consisting of 1-hydroxyethylidene-1,1-diphosphonic acid, 1-aminoethane-1,1-diphosphonic acid, aminotri (methylenephosphonic acid), ethylene diamine tetra (methylenephosphonic acid), hexamethylene diamine tetra (methylenephosphonic acid), diethylenetriamine penta (methylenephosphonic acid), diethylenetriamine hexa (methylenephosphonic acid), salts and degradation products thereof.
5. A process as claimed in claim 4, wherein the complexing agent is based on at least one compound selected from the group consisting of 1-hydroxyethylidene-1,1-diphosphonic, salts and degradation products thereof.
6. A process as claimed in claim 1, wherein the solution comprises hydrogen peroxide in an amount from about 0.5 to about 20 wt%.
7. A process as claimed in claim 1, wherein the solution comprises at least one mineral acid.
8. A process as claimed in claim 7, wherein the solution comprises sulfuric acid.
9. A process as claimed in claim 8, wherein the solution comprises sulfuric acid in an amount from about 0.5 to about 20 wt%.
10. A process as claimed in claim 1, wherein the solution comprises at least one surfactant.
11. A process as claimed in claim 10, wherein the solution comprises at least one non-ionic surfactant.

12. A process as claimed in claim 1, wherein the metal is selected from the group consisting of aluminium, copper and steel.

13. A process for cleaning metals comprising a step of contacting a metal with an aqueous solution comprising sulfuric acid in an amount from about 0.5 to about 20 wt% hydrogen peroxide and at least one compound selected from the group consisting of
5 complexing agents based on phosphonic acids, salts and degradation products thereof in an amount from about 35 to about 50 wt% based on the amount of hydrogen peroxide.

14. A process as claimed in claim 13, wherein the complexing agent is based on at least one compound selected from the group consisting of 1-hydroxyethylidene-1,1-
10 diphosphonic, salts and degradation products thereof.

15. A process for cleaning metals comprising a step of contacting a metal with an aqueous solution comprising alkali metal hydroxide, at least one non-ionic surfactant, hydrogen peroxide and at least one compound selected from the group consisting of complexing agents based on phosphonic acids, salts and degradation
15 products thereof in an amount from about 10 to about 60 wt% based on the amount of hydrogen peroxide.

16. A process as claimed in claim 15, wherein the complexing agent is based on at least one compound selected from the group consisting of 1-hydroxyethylidene-1,1-diphosphonic, salts and degradation products thereof.